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M. B.

HEALTH

A WEEKLY JOURNAL OF DOMESTIC AND SANITARY SCIENCE.

GAL 130

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Lie in three words, HEALTH, PEACE, and COMPETENCE."—*Pope.*

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

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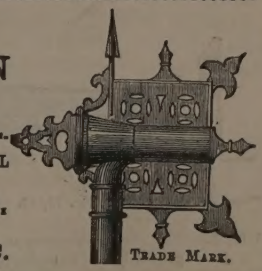

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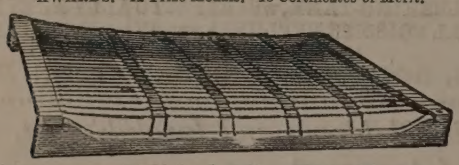

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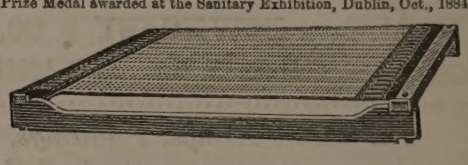

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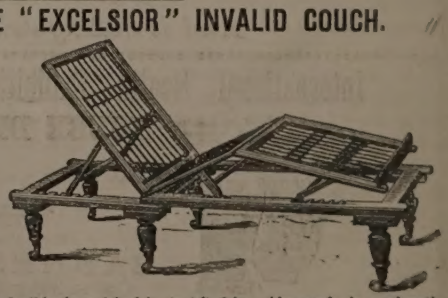

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HEALTH

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, JULY* 31, 1885.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

THE curious ailment or affliction known as "fear of falling" disease, has been recently made the subject of remark in the medical journals. This "falling sickness"—not to be confounded with epilepsy—consists in a nervous horror of high places, even when the subjects are in no danger of life or limb. A correspondent writes that a gentleman on one occasion visited York Cathedral: "His party had gone round all the lower parts of the edifice, and was then directed up the winding staircase on to the roof and tower. Notwithstanding the presence of ample balustrades, he became affected with falling sensations, inclining him to tumble over, and declined to proceed further, and so had to be carried to the nearest stairs and assisted to descend. The desire and the ability to practise mountaineering, or to scale heights and descend declivities, would seem to be a distinct faculty of the mind, which may be impaired or extinguished by bodily sickness. I may adduce the case of another person, in whom tropical fever had the effect of injuring the ability to climb heights, which had been previously a source of gratification. People, therefore, who find they have lost this power should avoid all "devil's corners," such as is well illustrated in the *London News* of last Saturday, in a view in New Zealand." Possibly this affection may be the unsuspected cause of many of the lamentable accidents which occur in the ascent of mountains and high places.

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IT is gratifying, in the best interests of sanitary science, to be able to note cases like the following:—On the 16th inst., at the Clerkenwell County Court, the owner of a house sued the tenant for rent. The defendant proved that the house was in an insanitary state, and stated that she had been for her health's sake compelled to leave it. A verdict was entered for the defendant with costs, and permission to cancel the agreement if she desired to do so. The sooner landlords are compelled to recognise that a house is taken on the tacit understanding that it is a healthy domicile, and that they are liable to lose their rent, and to be assessed in damages for ill-health which can be proved to result from the faulty sanitation of their premises, the sooner will the crying evil of "jerry-houses" become abolished.

SOME "Facts about Cholera," contributed to the *Lancet* by Surgeon-Major Sargent, form items of interest at the present juncture, with that ailment running its course in Spain. This author notes, amongst other facts, that epidemics of the disease in India "commence suddenly, and cease almost as suddenly"; while dull weather, a leaden and cloudy sky, absence of wind, rain holding off, and a hazy horizon, are also noted as being almost the invariable weather-concomitants of an attack. Dr. Sargent thinks it probable that "a certain state of the atmosphere only requires the circumstance of a large gathering of people to supply an exciting cause for cholera" (he has the pilgrimages of the East in view in speaking of crowds), and overcrowding in its turn acts likewise as an influence favouring outbreak.

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DR. SARGENT says that "it is a fact that all the places I know to be frequently the seat of cholera are also conspicuous for the overcrowding of its inhabitants. If the insanitary state *per se* was a cause of cholera, few villages in India would be free from the disease. In the same way a gathering of people does not necessarily mean an outbreak of cholera; but given a certain state of the atmosphere, the insanitary spot is likely to become the seat of cholera until the atmosphere alters in character, and those who have assisted in a large gathering are liable to be attacked with the disease."

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A NOTABLE point, and one of much interest in all discussions about cholera, is that of its connection with water-supply. On this head, Dr. Sargent contributes the following curious experience:—"If cholera was due to the drinking of contaminated water, or to such causes as enteric fever, say, is due to, I believe there would be much more cholera in India than there is—certainly more isolated cases—and it would also be difficult to account for certain characteristic features of the disease. It is well known that cholera will accompany a large body of people for days, and then suddenly leave them. On the march of a N.I. regiment I was with from Bolarum to Lingasugur, in December, 1868, cholera accompanied us for many days. 'Very well,' it may be said, 'your patients kept contaminating the water as they went along, or in other ways kept up the contagion.' We crossed the river Kristna, and the cholera ceased, but we still had our cholera patients in every stage of the disease, excepting actual fresh admissions, with us. My opinion with regard to this is that we got into a different atmosphere, leaving the cholera-tainted atmosphere behind us."

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REGARDING the infectiveness or contagious nature of cholera, we have Dr. Sargent telling us that it is in no way "contagious" in the ordinary acceptation of that term. He thus contends that cholera is not communicated from patient to patient, but that each patient acquires the disease on his own account, so to speak. "In my experience none of the attendants on, or those about, the cases of cholera have ever been attacked with the disease; and all who have treated disease in India know how, when a sick person is brought up from the bazaar, his or her immediate relations, and often the whole family, accompany the patient and remain in the closest communication with the same during the period of treatment. When an outsider without friends has been brought in, I have always detailed certain of the hospital establishment to look after the case, and I have never known a case of cholera to occur among those thus detailed; indeed I have never seen a case of cholera among the hospital establishment at all Sepoys with

cholera I have always treated in hospital as long as there was room for them, putting them in the veranda or in side wards, not through fear of contagion, but simply because the surroundings of such patients are not pleasant—putting them, in fact, in the same category with patients who require frequent attention, exposure of person, &c.; and I have never seen a patient in hospital, convalescent or otherwise, attacked with cholera."

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IN the matter of treatment, Dr. Sargent relies upon attention to the action of the intestines, and gives "a timely dose of calomel" when the discharge is scanty, with the result of causing renewed action and a healthier aspect in the case. He is a warm advocate of the alkaline treatment of the disease—a form of treatment practised years ago, and of which, we believe, the employment of "Lamplough's Pyretic Saline" was the practical outcome—because he regards the alkalies of the body as becoming exhausted by the attack. Plenty of common salt is also to be given in the arrowroot or corn-flour on which the patients are fed.

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THE "Government stamp" on patent medicine bottles will no longer deceive those who regard it in a light in which, by the way, it never professed to stand—namely, as a guarantee by Government of the excellence, purity, or value of the medicines thus "protected." I observe that the stamp in question is to have the words "This stamp implies no Government guarantee" imprinted on it. This change should surely answer most, if not all, of the somewhat excited comments which have of late been made regarding the deception which the stamp in question is alleged to have been the means of conveying to the public mind.

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DR. ROBERTS has the following interesting note in a medical contemporary on the prevention of that blindness in infants which results from the ophthalmia or inflammation of the eyes which is only too common after birth:—"The proposals to employ alum and other astringent lotions to prevent or cure infantile purulent ophthalmia would probably be more acceptable if it were more generally known to practitioners, nurses, and mothers, that infants are born blind, and even up to the end of the first month the function of sight is so imperfectly developed that manipulations about the eyes cause little distress to the patient. The sense of touch is also very imperfect during the same period, and washing the eyes of infants probably causes little more discomfort to them than washing any other part of the surface of the body. The conjunctiva (or white of the eye) is, of course, more susceptible to irritation and inflammation than the skin, but any distress of this kind would depend more on the nature and strength of the lotion than on the manner of its application.

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"PURULENT ophthalmia, moreover, further diminishes the sensitiveness of the conjunctiva and eyelids, as is obvious from the masses of flies which are allowed to infest undisturbed the eyes of children in Egypt, where this disease is a fruitful source of blindness. The first appearance of tears, which, according to Darwin, never occurs before the twentieth, and sometimes as late as the hundredth day, probably marks (and is probably dependent on) the beginning of the sensitive condition of the eyes, which becomes highly developed in adults, and the consciousness of which makes mothers timid in the application of remedies to the eyes of their infants."

Original Essays

"Life is not to live, but to be well."—*Martial.*

SPECIALISM IN MEDICINE.

BY DR. ANDREW WILSON.

BY "specialism" in medicine or art, we understand the habit of paying attention to, and of cultivating assiduously, one department of the field in which the worker labours. The "specialist" withdraws his attention from the general labour of his art or science, and confines himself to one particular branch of inquiry or practice. The sculptor, the landscape-painter, and the portrait-painter each "specialises" a branch of art. So in medicine, while, in a general way, we may say a surgeon is one who "specialises" surgery, as, contrariwise, the physician devotes his attention to physic.

But the range of specialism does not cease with this broad division of professional labour. Modern ideas and modern practice have evolved, in medicine at least, infinitely finer shades and degrees of "specialism" than are represented by the defined work of physician and surgeon respectively. There are to be found in every town of any magnitude, men who devote their energies solely to the cure of diseases of one special organ or part. Thus we find ear specialists, and surgeons who see few cases, if any, which are not connected with the eye. Specialists for the throat exist in numbers. Dr. Morell Mackenzie says that in one American city, with a population of only 130,000, he found thirteen medical men exclusively occupied in treating throat complaints. Then we are at no loss to discover that other physicians devote their energies exclusively to skin and hair, just as dentists specialise the teeth as the objects of their professional care. Physicians whose practice is confined solely to the diseases peculiar to females, form an important medical *côterie*, and so on—the list of subjects in medicine which receive the undivided care and study of certain members of the medical profession might be indefinitely prolonged. Although we have not yet reached that happy stage of specialism represented by the naturalist who knew and studied one small family of beetles and nothing more, it is easy to perceive that the habit of devoting the energies to a particular branch of practice is not merely a reality, but, we may add, a growing habit among medical men at the present time.

In a recent article on this topic, Dr. Mackenzie has ably discussed the *pros* and *cons* of medical "specialism." He points out what is perchance a self-evident fact to all, that this specialising of subjects by medical men is a natural result of the extension of knowledge and of the natural tendency of a man's labour and life to know one topic well, instead of wandering over the whole generalised field of medical practice. "Where education is most widely diffused," says Dr. Mackenzie, "there specialism finds the kindliest soil to flourish in—a fact which of itself should silence those who do not scruple to hint that it is a mode of trading on human ignorance."

There is a phase of this "specialism" which cannot fail to present itself for consideration to the public mind, in the shape of the relations which the medical specialist of to-day holds to the general practitioner—the "family

SCOTT'S MIDLOTHIAN OAT-FLOUR.—There is no preparation which can be assimilated with greater facility than such a flour as this. Those who suffer from indigestion might substitute for their ordinary breakfast materials this flour, prepared according to the recipe given by Messrs. Scott and printed on the tins.—ED. HEALTH.—[ADVT.]

doctor" of familiar life. It is true there has been a good deal of "pooh-poohing" of specialists by general practitioners, but, as far as we can discover, for no very clear reason; if, indeed, we except that hydra-headed monster "professional jealousy," which flourishes everywhere, which is capable of perpetrating the concentrated meannesses of life at large, and which regards any movement of novel kind with unvarying hatred and distrust. But when the public consider that in cases of sore distress and difficulty, they naturally demand the services of the "specialist" as those of a man who knows most about the ailments of the organ or part affected, it becomes clear that in the end the prejudice against "specialism" in medicine has to hide its head and to disappear. The question then resolves itself into a very plain one of demand and supply; and the public, not medical men, come to assume the office of arbitrators and judges in the question of specialism and its use.

It is absurd to suppose that when a person is affected with a particular disease, say, of ear or throat, that he will not avail himself of the services of the specialist who devotes himself to the ailment in question because, forsooth, his family physician may disapprove of the practice of consulting such authority. Of the great body of persons who have no regular medical attendant the above remark holds still more true. The search after health means and implies that the seeker shall procure the best advice to be had. If he is left to choose between the services of a general practitioner of medicine and those of one whose life has been spent in dealing with cases of a particular ailment, it is not matter even for hesitation to say that that specialist will be the richer in such an instance by a consultation fee.

Is there, however, it may be asked, any danger involved in this medical specialism, and, if so, what is the nature of the evil which threatens public or profession, or both combined? If we are to trust Dr. H. B. Donkin, who has replied to the paper of Dr. Mackenzie, there is an "other side" to the plain advantage claimed for medical specialism, which is, that a man who devotes his life to the study of one organ and its diseases can do what is necessary for the cure of such diseases better than the individual who is a good "all round" practitioner. Dr. Donkin's one collective point is that specialism is a kind of one-eyed affair after all; that it tends to narrow a man's intellectual and professional capacity; and that as the body and its systems are a connected series of parts, they cannot be studied piecemeal.

Now, all this is very true; only, Dr. Donkin's remarks appear to us to apply to the ignorant "specialist," to the medical "quack"—qualified or not, as the case may be—to the imperfectly educated surgeon or physician—and, equally, let us add, to the ignorant "general practitioner" as well. Dr. Mackenzie, as far as we can discover, never advocated ignorance in medical specialism. On the other hand, he plainly tells his readers that he disapproves as strongly as any man can of the "cramping" of the mind which is believed to follow the study of a limited portion of the medical art. No one maintains that the specialist should be a one-sided practitioner, or that his education should be other than full and complete. As a matter of fact, most, if not all, the specialists of note in the medical profession, began their career as medical practitioners, and are men of solid general attainments. It is from the basis of sound, general, medical education alone, that successful "specialism" can spring. Surely no voice will ever be heard either alleging or seriously maintaining that the educated specialist of to-day is other than a man whose particular calling has been based upon that broad general culture of medicine and surgery which every qualified practitioner is bound, as a matter of fact, to exhibit before he can legally become a member of the medical profession.

We have dwelt upon this phase of medical practice because we feel it is one in which the public are specially interested. As we have already remarked, the medical profession in this matter is really in the hands of the public. A patient, troubled with heart-disease, for example, cares not a jot for questions of professional expediency. His business is to secure the most skilful treatment of his case. He has learned enough of medical ways to know that there are men who have devoted themselves to the study of such cases as his own, and before one of these specialists he will lay his case. This is the plain beginning and end of the whole matter. Doctors may "differ," but their patients are shrewd enough nowadays to choose their most fitting counsellor in the shape of the busy specialist, who, in one day, it may be, has an experience of cases like their own such as the general practitioner could not boast of in a lifetime of ordinary practice.

What the fate of the "family doctor" will be in the future of medicine is a question which, like many other problems, may best be left to settle itself in time. His work may always be a requirement of family life, his services will always be a necessity of country existence. While the "specialist" gathering in the essence of knowledge in his own subject, and utilising that filtered learning for "the relief of man's estate" will be the doctor of the future, the general practitioner will still pursue his honoured calling, continue to be the friend and adviser of the family circle, and administer relief to the thousands who are removed from the more active tides of the life that pulsates in the great centres of population.

SEA-SICKNESS.

By Edward H. Riches, LL.D., F.R.A.S.

With the advent of summer, after the departure of the long, drear winter which settles over our sea-girt island, Englishmen look forward with pleasure to a tour on foreign shores. But to some the dread of a sea-passage is sufficient to cool the ardour of their wishes, and they hesitate before turning their backs for a time upon their native land. In the case of many, indeed, this fear of sea-sickness is sufficient to make the bravest halt, "and thus the native hue of resolution is sicklied o'er with the pale cast of thought." Unpleasant and painful, however, as sea-sickness is, it is rarely found that any real harm ensues to the individual suffering from the same when it is once over. In fact, the effect is often of much service to the bilious individual, and when once this dreaded form of illness has run its course, a physical and mental elasticity is the outcome which might have been longer postponed even after a most exemplary attention and devotion to the luxuries afforded by Apothecaries Hall.

During a long and extended sea-voyage through the North Sea, English Channel, across the dreaded Bay of Biscay, from one end of the Mediterranean to the other, through the Grecian Archipelago, Sea of Marmora, the Dardanelles, the Bosphorus, the Black Sea, and the Sea of Azov, we have lately had an opportunity of carefully considering the question of sea-sickness, its causes, and how (in our opinion) it may be avoided.

To Inventors.—Inventions protected by Royal Letters Patent at lowest rates. Provisional protection for nine months, £2. For all information concerning Patents address Messrs. Lulman & Co., Patent Agents, 8, Essex-street, Strand, London, W.C.—[Advt.]

We have previously heard of certain diets recommended to those who dread the effects of a sea-passage, and of prepared medicines to be taken, and also of fastening a broad leather or flannel band tightly round the stomach, but we are led to believe that such expedients are hardly worth adopting. We admit, however, that if some such courses as these be adopted, with the cheerful belief that benefit will ensue, sea-sickness may be warded off for a time. The fatal moment, however, will sooner or later come, when the heart will give, when the cold perspiration will settle on the brow, when the features will become distorted and haggard with the consciousness that the "breakdown" is coming, and the brain and the body each becomes, for the time being, a tottering, half-paralyzed wreck.

When sea-sickness has commenced, perhaps the best thing to be done is to drink freely of milk and soda-water mixed; by this means the malady may be considerably eased, provided it be not then fought against—in fact not until it has run its course. But our experience teaches us to believe that a rational and practicable means may be adopted to prevent even the premonitory symptoms of sea-sickness. It has lately been followed out by us, and a sea-voyage of some nine thousand miles, when the roughest weather has been encountered, and waters in all their variously insinuating tendency to cause rolling and pitching of the vessel—including, too, that much dreaded feeling of the vessel's sinking downwards by strong and spasmodic efforts, as if determined to leave us in mid-air—have been ours to do battle with, has failed to produce sea-sickness even in its initial stages.

Put briefly, then, the means we have adopted with such happy results, and what we heartily recommend to those who feel disposed cheerfully to give it a thorough test, consists in a proper management and control of the voluntary and mixed muscles.

The human frame contains two classes of muscles—viz., the voluntary and the involuntary. It is the former, over which our will has control, which are subservient to our every action in relation to the external world. The involuntary muscles are those connected, we may roughly say, with the internal and nutritive functions of the body, and over these the will has no constant or immediate control. The voluntary muscles, then, we may regard as the muscles of animal life, whilst the involuntary muscles may be thought of as muscles connected with organic life, and those muscles which belong partly to each of these divisions, as, for example, the muscles of respiration and the sphincters, &c., are regarded as mixed muscles. Now, if it be remembered that the muscles receive large arteries and veins from the trunks passing near to them, and also that they receive a large supply of nerves—in fact, a greater number than any other organs of the body, it is not difficult to apprehend the fact that the greater the control we have over these muscles the greater general effect upon the system will ensue.

Nearly one half of the brain and spinal cord is for the supply of nerves through which the will may act upon the voluntary muscles, or through which their motions may be excited by other stimuli. For the general reader, it will not be necessary in the present instance to go into the matter of the nature and structure of the whole muscular system. Suffice it to say that the voluntary and mixed muscles are under our immediate control, and, as long as the will is not absent, it is possible for us to make them subservient to the same.

There can be little doubt that the movement of the vessel is the direct cause of sea-sickness, this effect being the result of such movement acting upon our eyesight, and through it upon our stomach.

The stomach is also affected to a certain extent by the movement of the vessel, apart from its connection with the relation of the eyes to the involuntary muscles in the region of the stomach. This may be proved in the case of blind persons, and those who close their eyes.

Such being the case, our endeavour should be to minimise the effect of the movement of the vessel, as far as possible, with respect to ourselves. It will be readily seen how this may be accomplished to a great extent by displaying a systematic, determined, and thoughtful control over the muscles. It will be found to be a very easy matter to allow the muscular action to control the movements of the body—*to avoid the reverse of this*, and thus to bring about a sympathy of movement between ourselves and the vessel. The best rider in the saddle is the man who rides in such a way that he seems to be a part of the horse, and surely the best sailor will be he who rides his vessel as if he were a part of the same. It is a fatal mistake, and one ever fraught with disastrous results, to fight, as it were, *against* the rolling and pitching of the vessel. For great muscular effort is thereby brought about, the nervous system is upset, till at last voluntary and mixed muscles become one with the involuntary set, and the result is a disturbed digestion and the usual painful vomiting. After all, this sympathy of movement between ourselves and the vessel is only another way of expressing what is meant by "sea-legs." Every one upon starting on a cruise is told that "in two or three days you will get your sea-legs, and then you will be well enough." But why wait these two or three days? we ask, for sea-legs may be ours at once, if we like. With a little thought, determination of purpose, and a sensible control of the muscles, one may at once bring about that harmonious movement between oneself and the vessel, so that neither the pitching from bow to stern, the rolling from side to side, the peculiar "all-round" movement which is a combination of these two, added to "the falling-away-down-down action," will have a disagreeable effect upon us. In fact, an inward satisfaction is soon experienced when it is found that we have become superior to any eccentric movement whatever.

One thus becomes part of the vessel, and all ordinary movements of the same need have no unpleasant effect upon the most delicate and timid, provided it be the set purpose of the individual not to fight against the movements but to sympathise with them. We shall be conscious of this endeavour for a time, of course; but very soon the effort will be spontaneous and natural. We shall not be alive to it, and to our great delight, we shall find that we have put off our land-legs and assumed those more adapted to our circumstances. We assure our readers that the task will be found an easy one to accomplish. There is another point which must not be overlooked, viz., the matter of eyesight. Until the body has assumed that necessary harmony of movement alluded to, when a delicate perception teaches us the probable extent of roll and pitch; until the legs seem to know intuitively how many strides forward they may judiciously take before a change in the vessel's movement necessitates a standing still or a step backward, or one to the right or the left, in order to maintain our harmony of movement—until then, care must be taken in avoiding our eyes resting too long on the moving sea, on rectilinear walls and ceilings of cabins, which assume, as they will do, all sorts of eccentric angles with respect to ourselves, on lamps, &c., swinging from ceilings, &c. We know how even on land the effect of looking at certain movements may produce a desire to vomit. Ordinary sense must dictate, then, the course to pursue on board ship.

Of course, too, in the case of long voyages, where varieties of temperature have to be experienced, care and attention must be paid to the matter of diet; but there is one thing we are fully assured of—viz., that when, by proper muscular control, the dread of sea-sickness has passed away, the very movement of the vessel is highly conducive to a proper working of the digestive organs. There is an increased vitality in these parts, and even articles of consumption may be taken with impunity at sea, the very mention of which would blanch the cheek of the dyspeptic on land.

There is, however, a form of sickness experienced at sea which is totally apart from what is ordinarily known as sea-sickness; this is the result of prostration and weariness consequent upon an insufficiency of exercise after long weary hours of waiting for a storm to abate. But even this, we have found, can be controlled on similar lines of proceeding, when exercise of the muscles has been rendered possible, even when ordinary walking below or on deck was out of the question. Amid the crashing and noise of a storm in the Mediterranean, and also in the Black Sea, when the vessel seemed to bend and to shiver with vibrations, shaking nerve and sinew, we can assert from personal experience that the effort to control and exercise the muscles, voluntary and mixed, has been of signal service.

The Sweating Sickness of Old.—The sweating sickness, first showed itself in 1485, and reappeared in 1506, 1517, 1528, and 1551. It was called *Ephemera pestilentia*, or the one-day pestilence, as it carried off very many within twenty-four hours, and if that was survived it ended in a low fever, which too often killed on the fourth or eleventh day. This new disease was confined to the English at first, and did not spread beyond Calais; but after the fourth epidemic it broke out in Hamburg, and spread to Denmark and Scandinavia, and up the Rhine into Germany, where it ravaged the Turkish army before Vienna. It began in the reign of Henry VII., and ceased in that of his grandson. Another new disease originated in France in 1528, and again in 1545, and was then brought to London. It was called the *troupe galante* because it scorned to attack any but the vigorous and robust, and also the *cholera morbus*, which killed in a few hours, or by a secondary fever, and it was very fatal. The army of Henry VIII. brought it to England from the siege of Boulogne in 1545.

New Source of Spermaceti.—In a lecture delivered a little time ago at the Royal College of Surgeons, by Professor W. H. Flower, that gentleman remarked, as a curious fact, that whales had, in recent times, continued to increase in size in a very notable manner. None of the extinct species described with so much care by distinguished paleontologists were anything like so large as those which now inhabit our northern seas. The largest whale at present known, is, according to Professor Flower, the species named *Balænoptera sibaldii*, which attains a length of about eighty feet. The spermaceti whale is no exception to this extraordinary law, which shows that while, as far as we know at present, all other animals are getting smaller as the world gets old, whales are increasing in size. With regard to the last-named species, it is evident that it will constitute an ever-increasing source of spermaceti as its bulk increases; but as the lecturer above named has not fixed the exact rate at which this increase of bulk takes place, it is tolerably certain that the circumstance alluded to will not be liable to cause any perturbation in the spermaceti market for a very long series of years.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

THE HEALTH-CARE OF THE AGED.

By L. H. Watson, M.D.

CONCLUDING PAPER.

It would be useless to present a dietary list to which one should be strictly confined. A long life of indulgence in eating and drinking, as well as diversity of taste, would preclude any attempt at regulating the diet of healthy elderly people. To those who have arrived at an advanced age without any form of indigestion, I would suggest a cup of coffee and a slice of dry toast before rising in the morning. The reason why this should be served while one is yet in bed is, that very old people, even when perfectly well, are often subject to a slight faintness and nervous tremor before rising, and the exertion necessary to dress often leaves them too faint to eat. It takes but a few moments to prepare it, and, as old people like to rise early, it is usually an hour or two before the family are prepared for the morning meal.

A light luncheon at noon, and dinner not later than five or six o'clock. If the dinner is taken at noon, and supper at six o'clock, it will be found to suit the habits of the aged better in one way, as old people love to retire early. In most countries, among civilized nations, the practice of crowding three meals into the twelve hours or more of daylight has grown to be such a habit that it seems a heresy to suggest eating when hungry, day or night; nevertheless, I would suggest to the healthy and not *too* aged person to forget the "bugbear" of "not eating before retiring," which compels many a person—otherwise disposed—to pass ten or twelve hours with the stomach in a collapsed condition, while during the other twelve it is constantly distended with food. I would say to the aged, "Eat sparingly and eat frequently. Let your food be light, and easily digestible, but eat when hungry, whether it be twelve o'clock at noon or twelve o'clock at night." Aged people are light sleepers, and often wake up during the night with an intense craving for food, and a good plan is to have a cup of bouillon and a cracker on a stand near the bed. The broth can be readily heated by an alcohol lamp in five minutes. This simple habit will often procure hours of uninterrupted slumber, which would otherwise be passed in restless longing for daylight and breakfast.

I have said, eat sparingly and frequently; eat sparingly, because the digestive action is not so strong as in earlier life, nor is the demand for large quantities of food so urgent. Eat frequently, for several reasons. The digestive organs are not then burdened with large quantities of food, and dispose of it with greater ease. A moderate amount of food in the stomach gives a feeling of comfort and quiet to a person whose sole occupation may be a little reading or knitting, or even nothing at all, when extreme age is reached.

The kind of food to be eaten varies with the condition. If the old person needs building up, the more nutritive foods—that is, those containing the greatest amount of

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An Important Health Tract.—A Short Catechism on the Cholera, by Dr. Thomas J. Hutchinson, reprinted from Health, and adapted for distribution by Health Societies, City Missionaries, and all interested in the diffusion of health-knowledge among the masses. Ten copies for 9d.; 20 for 1s. 3d.; 50 for 2s. 6d.; and 100 for 4s., post-free, to be obtained from the Publisher, Health Office, 74, Great Queen-street, W.C.—[Advt.]

nourishment to a given volume, the greatest proportion of assimilative matter; if, on the contrary, it is necessary to encourage the digestive action, we select stimulating food. In this connection I shall quote from an eminent French authority :—"As age advances, not only is one able to bear with impunity food which is piquant, pungent, and more exciting, but the use of these latter foods is necessary to the physiological conditions acquired by the 'organs of digestion.'

"This alimentation becomes especially necessary to individuals whom residence in great cities, sedentary life, and confining work separate in a great measure from the natural conditions of life found in free air and bodily exercise." With regard to the use of wines or liquor by the aged, I would say, if there is a proper time in the life of a man when he should use stimulating drinks, that time is when he has arrived at a good old age.

A glass of sherry or burgundy during dinner often aids digestion wonderfully. When the tongue is pale, and the desire for food absent, a "nip" of brandy will stimulate the stomach into secreting properly. This condition of atony or sluggishness of action is not at all unusual. A glass of milk-punch at night often goes, as a very good and exceedingly temperate old lady once said to me, "to the right spot." Coffee is a natural drink for the aged. Its mildly stimulating, soothing qualities directly indicate it as a beverage for the old. Gasparin tells us that "coffee has the property of rendering the elements of the body more stable, and thus, if not affording nourishment, it diminishes the waste going on."

The origin of many dyspepsias in the old will be found in the lack of the proper means for the complete mastication of their food. The loss of their teeth, and the neglect to replace that loss with artificial ones until a dyspepsia is established, will often entail a long train of ills. A set of false teeth will sometimes remove dyspeptic troubles of long standing. The teeth wth metal plates (platinum or gold), although more expensive than rubber or celluloid, are to be preferred. Mastication must be well performed even if the food is not very solid. The one golden rule is to eat slowly.

Some old people have idiosyncrasies about certain foods, which must not be overlooked. Milk is one of the most easily digested of foods, on account of its various constituents, and can be taken when nothing else is permissible. Eggs, soft-boiled or raw, are easily digested. Oysters, fish, and lamb, follow in about the order named. Beef, mutton, and fowls, and wheaten bread, occupy about the same time in digestion. I have met with two forms of dyspepsia more frequently than any others in prescribing for old people—the acid form, where there is an excess of acid found in the stomach, and the atomic form, where there is sluggish action of the mucous membrane of the stomach, and the time for digestion is greatly lengthened. In acid dyspepsia, Dr. Ringer recommends the use of glycerine, stating that an old gentleman, upon learning that glycerine prevented milk from turning sour, concluded that it would be just the thing to prevent "himself from turning sour." I have used glycerine combined with charcoal with considerable success in remedying this form of dyspepsia.

Dilute nitro-muriatic acid, a half-teaspoonful in a claret-glass of water, immediately after meals, breaking up the weaker acids and affording the natural acids of the stomach, is an exceedingly useful remedy. The atonic form of dyspepsia, combined with loss of appetite, requires quite a different treatment. The stomach is feeble, and needs stimulating; two or three grains of capsicum with one half-grain of aloes, in a capsule, will excite it to action; the constipation which often accompanies this form will be obviated.

When there are accumulations of gas, charcoal tablets an hour or two after meals generally give great relief; but it is not a good plan to keep up their use permanently, as it tends somewhat towards constipation.

Electricity is the great tonic for these debilitated, relaxed stomachs. The sympathetic nervous system is rehabilitated, and the most marvellous effects are often produced. The apathetic condition of the intestinal track is dissipated, the liver pours out its bile, and life seems to move on again.

Alkalies taken before meals stimulate the flow of the gastric juices. Slight fatigue often spoils the appetite, and lowers the digestive power; hence the old person should rest *before* as well as *after* meals. Nothing so securely revives this as a glass of wine before meals. While small quantities of alcohol aid digestion, larger quantities retard it and encourage stomach troubles. The quantity of wine or brandy must be small when taken for this purpose.

COLD-CURING AND HAY FEVER REMEDIES.

Dr. Hager seems to have made an attempt to realise a great desideratum, and has given us the composition of a kind of "smelling" compound, now known on the Continent as "Hager's Olfactorium." It is a singular preparation, already much used as a remedy for coryza, as well as for catarrhal attacks in general and spasmodic asthma. The composition is :—Pure carbolic acid, five parts; liquid ammonia, of sp. gr. 960, six parts; water ten, and rectified spirit fifteen parts. This preparation is poured on cotton-wool, which, when thoroughly soaked, is introduced into a kind of smelling-bottle to be carried in the pocket. When required for use the stopper is withdrawn, and the vapour emanating from the cotton-wool is inhaled so as to perpetrate nose, mouth, and throat.

The author has since modified this preparation so as to make it available as a preventive of infection for practitioners, nurses, &c., who attend cases of infectious disease. The formula stands thus :—Pure carbolic acid, ten parts; essence of turpentine (or essential oil of *Eucalyptus*), five parts; rectified spirit, twenty; and liquid ammonia (fort.), twelve parts. The cotton-wool is soaked with the liquid as above, and immediately introduced into a wide-mouthed stoppered bottle.

Another practitioner states that he can cure an attack of coryza in a few hours by causing the patient to inhale steam from a jug of boiling water on which a pinch or two of camphor has been thrown. To make asthma powders, the following may be tried :—Belladonna root, stramonium, digitalis, lobelia, each five; myrrh and galbanum, each ten; nitrate of potassium, fifty; all parts by weight; mixed and reduced to a uniform, rather coarse powder, which is used by burning a little on a plate covered with a paper cone open at the top, the smoke being inhaled by the asthmatic patient. Another formula :—Stramonium (coarsely ground), thirty; extract of opium, two; nitre, five; the last two dissolved in (ten) and sprinkled evenly upon the first; the whole then spread until the water dries away.—*Chemist and Druggist.*

Treatment of Blackheads.—A simple plan of treating the above is by dusting the face with precipitated sulphur every night with an ordinary puff. The sulphur can be scented with oil of roses or lemon.

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Public Health

"Health is the first Wealth."—*Emerson.*

OUR AMBULANCE LECTURES:

What to do in Emergencies and Accidents before the Doctor comes.

By Various Writers.

XIX.—HOW TO TREAT FRACTURES OR BROKEN BONES.

By James Whitson, M.D.

(Assistant-Surgeon Glasgow Royal Infirmary.)

There are few subjects a correct knowledge of which is of more value to the ambulance pupil than that of fractures. Their prompt recognition and early treatment are of the first importance for the well-being of the patient, and when we take into account the fact that they are liable to happen in the most unlikely places—frequently far away from where a medical man can be readily obtained—it is evident that much needless suffering is certain to be endured if injuries of this description are either left unattended to or unskilfully dealt with.

A few years ago, owing to the prevalence of untrained hands and defective methods of transportation, instances were not uncommon of simple fractures being rendered compound, but it is pleasing to be able to add that, since a knowledge of ambulance work has been infused throughout the great centres of labour, and ambulance-waggons placed at the service of the community, examples of this kind are comparatively seldom met with.

In order to discuss the subject of fracture thoroughly, and, at the same time, with that degree of lucidity which is essential for a perfect understanding of the matter, it seems to me expedient to consider it under four heads. These are as follows:—

I.—The definition of a fracture, and of the causes which lead to its production.

II.—The various kinds of fracture.

III.—The signs of fracture.

IV.—The treatment of fracture.

I.—THE DEFINITION OF A FRACTURE, AND OF THE CAUSES WHICH LEAD TO ITS PRODUCTION.

A fracture may be defined as the breaking or snapping of a bone or bones, this breaking or snapping—or "solution of continuity," as it is technically termed—being effected either through the medium of *direct* or *indirect violence.*

A fracture is said to be brought about by *direct violence* when the force or forces which have led to the production of the injury have been applied exactly at the spot where the bones have given way. No better example of this could be given than that of a carriage wheel or cart wheel passing over the bones of the leg and breaking the tibia and fibula at the point where it came in contact with them. In the same way, a heavy body such as a brick or chimney can falling from a height and in its descent smashing one or other of the bones of the skull is, perhaps, as convincing an example of a fracture brought about by direct violence as could be laid before you. When a fracture is due to the action of indirect violence, the force which has occasioned the mischief is applied at a distance from the seat of fracture; and the bones are compressed to such an extent between a resisting medium on the one side and the weight of the body on the other, that they give way in consequence of the strain which is brought to bear upon them.

One of the best illustrations of this which could be brought under your notice is that of a fracture of the leg or thigh produced by jumping from a railway train while in motion. In such a case there are three factors called into operation, and these are:—(1) The velocity of the train; (2) the ground; and (3) the weight of the body. If any one jumps from a railway train while going at a certain rate of speed, it is evident that in doing so he must acquire the momentum of the train in question, and will therefore be shot forward with an impetus corresponding to this momentum. Immediately after jumping the further progress of the individual is barred by the ground—the solid resisting medium on the one side, while simultaneously the third factor (the weight of the body) comes into play by compressing the bone or bones between the ground below and its own weight above, and in consequence of the pressure which is brought to bear upon them they give way either at their greatest convexity or at their weakest point.

A fracture of the forearm is frequently produced by a fall on the hand, the radius being usually snapped across about an inch above its lower end as a result of the undue compression which in this way comes to be exercised upon it. Muscular action is also occasionally the cause of fracture, and there are instances on record where the clavicle has been broken by a back-handed blow. The patella is often divided in two by violent muscular effort.

II.—THE VARIOUS KINDS OF FRACTURE.

1. Simple.—*Green-Stick; Impacted.* 2. Compound.—*Comminuted.*

Fractures are divided into two great classes, the *Simple,* and the *Compound.*

In the *simple* fracture the bone is broken, but there is no external wound, the skin over the seat of fracture remaining intact.

In this class may be included the *Green-Stick Fracture,* and the *Impacted Fracture.* In the *Green-Stick Fracture* the bone becomes bent. It is only seen in children, and cannot take place after the osseous tissue has undergone hardening. In the *Impacted* species (*Impactus* from *Impingo,* I drive in) the one end of the bone is driven into that of the other and remains fixed there.

The *Compound Fracture* is one where, in addition to the bone being broken, there is a wound leading from the skin to the seat of fracture and communicating with the atmosphere. On this account a compound fracture constitutes a graver form of injury than a simple one, owing to the chances of decomposition occurring within the wound. Fortunately, however, the dangers in this way have been greatly lessened since the introduction of the Antiseptic system; but ambulance pupils will be best able to realise what a boon the Listerian method of wound-treatment has proved to surgery when I tell them that twenty or thirty years ago the treatment adopted in the majority of compound fractures was amputation of the limb; it being found by experience that the rate of mortality was lowest when this course was followed.

In the *Comminuted* variety (*con,* together, and *minuo,* I lessen) the bone is reduced to a number of fragments. It

Scott's Midlothian Oat-Flour.—Messrs. A. & R. Scott, of Kingston, Glasgow, and Finsbury-square, London, have prepared a singularly pure and nutritious "Oat-flour," which bids fair to take high rank among the food products which are specially adapted for infants and invalids, and for the use of dyspeptics in particular, whose digestion is weak, and whose stomachs refuse to assimilate foods of ordinary kind.—Ed. Health.—[Advt.]

usually accompanies the Compound Fracture, and is almost invariably the result of severe direct violence.

III.—THE SIGNS OF FRACTURE.

The *signs of fracture* are of the utmost consequence, and an intimate acquaintance with them greatly facilitates the detection of an injury of this kind. The more important of them may be enumerated as follows :—1. *Pain.* 2. *Inability to use the affected limb or part of body which has been injured.* 3. *Swelling.* 4. *Change in the Shape of the Parts.* 5. *Unusual mobility of the parts.* 6. *The detection of Crepitus.*

The first and most obvious sign of fracture is *pain.* It is a well-nigh constant symptom, though its intensity varies with the susceptibility of the individual. A noteworthy point in connection with this symptom is that in the majority of instances it is accurately localised.

The second sign, and one which we rarely fail to observe, is an *inability to use the affected part.* If an arm or forearm be broken, it is seldom that the individual can put his hand to his head, and any attempt to do so is almost certainly futile. In the same way, if a leg be broken, locomotion is impossible, and the patient speedily finds that attempts at progression are attended with excruciating pain. When a person has sustained a fracture of the ribs, it is commonly found that the drawing of a long breath is accompanied by what is termed "a stitch in the side," and which, to those who are unfamiliar with this particular class of injuries, may be described as an acute lancinating pain, caused by the sharp spiculæ of the broken ends of the bones pressing where they ought not to do so.

Swelling is a symptom which, unless in exceptional circumstances, seldom manifests itself at the time of the accident. If the limb, however, has been allowed to remain for some time unattended to, or be unskilfully handled, swelling is likely to follow. It is caused by effusion of blood into the tissues surrounding the broken bone, and allowance must be made for it in the subsequent treatment.

Change in the shape of the parts furnishes valuable evidence in regard to the existence of fracture, because a marked deformity in a limb can only arise from the displacement of the broken ends of the bones. In some cases this is so striking as to afford ocular proof of the presence of fracture; but when it is not so well marked, comparison of the limbs—of the sound with the affected one—is a valuable aid towards diagnosis, and points of difference are in this way brought clearly out which, but for the contrast, might have escaped observation. The length of the limb may come to be interfered with; and if we have over-lapping of the ends of the bones—as frequently is witnessed in fractures of the thigh—shortening of the limb necessarily ensues. Displacement of a bone may be caused by direct violence, as when a portion of the skull is driven inwards by a blow; but as a rule, it is due to a combination of gravity and muscular action. In a typical fracture of the thigh, occurring in its middle third, we have almost invariably shortening of the limb and eversion of the foot; the first being due to muscular action, and the second to the force of gravity.

Unusual mobility of the parts is a striking characteristic of broken limbs. If we subject the suspected limb to manipulation, we find that there is flexibility where none ought to exist; and in carrying out this process we quickly detect the sixth and last sign of fracture—crepitus.

Crepitus may be described as the grating between the broken ends of the bones, and when it is elicited, we have convincing evidence of the presence of fracture. It may, in short, be designated the crucial test of fracture.

Recreation and Health

"Health is the vital principle of bliss,
And Exercise of health."—*Thomson.*

PHYSICAL TRAINING.

By D. A. SARGENT, M.D.

Professor of Physical Training and Director of the Hemenway Gymnasium, Harvard University.

FOURTH PAPER.

INASMUCH as our college students raise thousands of dollars annually for the support of athletic organisations, and are lampooned throughout the country for the excessive interest they are supposed to take in physical exercise, it might naturally be suggested that the reform begin with them. But having stood at the door of one of our largest universities and examined thousands of youths as to their health and physical capacity, we feel prepared to say that the reform should begin in homes and preparatory schools. Students enter college trained in mind but not in body, and where one fails for want of mental ability ten break down for want of physical stamina. Many are short in stature for their age, or tall and slender, with a deficiency of muscular strength. Under an appropriate system of physical training, however, they make most rapid advancement, showing that their bodies had been kept in arrears while their brains were developed. Many are ignorant of the first principles of physiology and hygiene, and leave school with acquired defects which are past remedying, but which a little appropriate knowledge and training could have obviated. Not infrequently the students who stood the highest in the preparatory schools are taken with a sort of mental dyspepsia after entering college, and devote most of their energies to physical exercises. This is invariably the case where the preparatory training has been forced and unnatural.

If you approach the teachers on the subject of physical training, most of them will tell you frankly, that the school curriculum is made up of so many studies, that they have so many hours to teach so many branches to fit a youth for the next grade, or to prepare him for college, and that if a pupil break down in his attempt to keep up with the requirements, he must drop out, and let his parents and physician take care of him, for they hold that the teacher's province is to train the intellects, and not the bodies of his pupils.

Unmindful of the fact that the intellect is sustained in its function by the same heart, lungs, and stomach that sustains the body, that the period of youth is the time nature has set apart for the growing, strengthening, and perfecting of the vital organism, and that ninety-nine out of every hundred that graduate from our public schools must necessarily earn their livelihood in occupations where health, physical stamina, and power of endurance, with ordinary intelligence, will count for more than highly-developed intellects without the sound physical basis. Inasmuch as millions are being expended annually upon the education of youth, who either break down in preparing for their life's work or are rendered useless or inefficient from the want of a little health and vigour, it would seem that physical training in its broadest and noblest acceptation should form part of the regular school curriculum.

But such a training is not to be procured simply by making physical exercise a requirement. There must be intelligent direction behind it, a thorough knowledge of the human organism, and a wise adaptation of means to ends.

This can only be secured by creating a public sentiment that will place every school in the country under the care of a medical supervisor.

Shame upon the civilisation that puts a premium upon sickness, suffering, and death, and compels the physician to sit in his office and wait serenely for the onslaught of disease, which a little timely advice from him could have obviated. The highest province of the physician is to improve the hygienic conditions of the individual, the sanitary condition of the community, and to prevent disease wherever and whenever it is possible. In order the better to discharge his humane office, he should frequently be invited to examine the children and their surroundings. He should be familiar enough with health to know it when he sees it. He should be educated to deal with physiological problems, before they become pathological.

His work should be supplemented by the intelligent co-operation of parents. They should know something of the lives of their ancestors, and their mental and physical characteristics, their nationality, occupation, and the healthfulness of the town or city in which they were born. Parents should note the same facts with regard to their own lives, keeping a history of their accidents, diseases, and mental and physical conditions before and after marriage. The same information and more should be recorded respecting the lives of the children. The weight should be taken at birth, and the head, body, and limbs carefully measured.

This process should be repeated once a year at least throughout the whole period of growth and development. The various stages of dentition should be noted, the age at which the child begins to walk, the resemblances to father and mother, and the dawning of hereditary traits.

After three or four years, the relative proportions of the different parts of the body should be determined, and the animal rate of increase in height, weight, strength, chest girth, &c., should be carefully ascertained and recorded. A history of the children's diseases should be kept, and the peculiar taste and idiosyncrasies that accompany them.

The first appearance of morbid tendencies, perverted growths, and malformations should be noted, and judicious efforts made to correct them. In early life a child should be taught to respect his body, to pride himself upon the purity of his skin, the firmness of his muscles, and the uprightness of his figure.

THE State Board of Health of Iowa has ordered that on and after July 1 the bodies of all persons who have died of smallpox, scarlet-fever, or diphtheria must be wrapped in a cloth saturated with a solution of corrosive sublimate, sixty grains to one gallon of water, before removal from the sick-room, and then be tightly sealed in a coffin and buried immediately. It is also ordered that there shall not be a public funeral at a house, nor on any premises where there is a case of infectious or contagious disease, nor where a death from such a disease has occurred.

DR. ROBERT LEE recommends the following for obstinate cases of ringworm:—Mix precipitate sulphur in a mortar with sweet oil to the thickness of cream; then add to the mixture three drachms of Calvert's carbolic acid, No. 5 solution, that is, about a twenty per cent. solution. This must be applied twice a day, night and morning, and should be rubbed gently in with the finger on a piece of soft leather. The head should also be washed and brushed with carbolic soap and hot water two or three times a week.

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sidney.*

Neuralgic Headache of Women.—The increased, and apparently increasing, frequency of neuralgic headache among women must needs have a cause. There is one of singular simplicity and quite obvious which has been overlooked, and to which it is worth while to draw attention. The pain experienced is generally located in one or more of the branches of the second cervical nerve, very commonly those terminating in the scalp at the occiput or back of the head. As a matter of fact, the nerves of the scalp are irritated by the hair being drawn tightly back and put on the strain, not as a whole, in which case the strain would be spread over a large area of the surface, but by small bundles of hair which are pulled back and held in place by hair-pins. Relief is often consciously experienced as a result of removing the hair-pins, but this has only a temporary and partial effect. The injury done is lasting, if not permanent, in its consequences. The present style of dressing the hair should be discontinued, as it probably, in part at least, accounts for the extreme prevalence of a form of suffering which is both intractable and distressing. —*Lancet.*

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The Spread of Infectious Diseases.—To any one knowing the wide diffusion of infectious maladies, their subtle means of spreading their desolating influences, their pernicious effects upon human health, and, alas! their too frequent destruction of human life, the task of compressing into a single lecture even the outlines of what is known of these various zymotic maladies, must be difficult. Yet the lecture read by Dr. Simpson to the members of the Aberdeen Branch of the Educational Institute of Scotland, and published in the *Sanitary Journal* of Glasgow on January 7, may be instanced as a most successful effort to communicate to those who are the instructors of youth in the north-east of Scotland, the main facts relating to the spread of infectious diseases. "These maladies," Dr. Simpson writes, "retard, perhaps more than any other cause, the progress of the education of the child, and they are, at the same time, a source of great pecuniary loss to the teacher. Measles and the first and second standards seem to go together as a matter of course, and the other diseases of the febrile class are distributed with a liberal hand over the various stages of school-life." Would that we could imprint these significant words deep, very deep, in the minds of school-managers! From the health-officer's point of view, considering the effects of these diseases upon human health and human life, it must ever be the most prominent end and aim of his efforts to prevent the spread of their contagious seeds. His earnest efforts to attain those desired ends would doubtless be aided by every enlightened practitioner of medicine, and should be supported by every parent. But the view presented by Dr. Simpson—the loss of time sequent upon sickness due to fevers, the loss of money sequent upon absence from school, the loss of the weekly pence, the annual grant, the bonus for good work—these suggest certain potent well recognised influences upon the community generally, which should be duly considered by those to whom the oversight of the young in schools is assigned. The question will rise to the lips of such persons, Can the spread of infectious diseases be prevented? The answer is clear, "Yes, and by your own efforts. All things have a beginning. Fevers spring from single cases. Note the occurrence of such first cases; dismiss for a

definite time all children who may have been in immediate contact with the infected child, and you will quickly control the spread of disease."—*British Medical Journal.*

* * *

Coca in Fatigue.—Dr. E. R. Palmer, of Louisville, gives in the *American Practitioner* an account of a very remarkable experiment made with Fraser's wine of coca. He visited a seven-day "go-as-you-please" pedestrian match on the sixth day, and found that a girl of 17, who had completed 247 miles, had abandoned the contest, but had been persuaded to resume it on a written contract to pay her 100 dols. extra if she completed 350 miles in seven days. She was walking with evident pain and weariness, gait unsteady, eyes sunken and surrounded by broad dark rims. She had nearly 103 miles to complete in 36 hours to save her distance. At the doctor's suggestion Fraser's wine of coca was given, under his own supervision. She drank a large sherry-glassful at once, and another in 20 minutes. At 30 minutes after the first dose her step was quick and elastic, head up, and she declared that she felt like a new woman. In 10 hours she consumed a pint of the wine, and walked 48 miles, then slept for 2½ hours, walked 3 miles, and slept again for about 6 hours. She then walked for 8½ hours, with an hour's rest for food, covering 31 miles. At this period she was the freshest of all the competitors, and her time the best, barring the spurts of a professional runner. At the 339th mile she had a fall, which rendered her insensible, but she returned to the contest, and completed the 350 miles, with 14½ minutes to spare. The wine of coca was given freely whenever she called for it; it did not interfere with her digestion. During two days after the contest the wine was administered regularly. It was then withdrawn, when the pulse somewhat increased, with slight irregularity, which soon disappeared. He says: "To my mind the experiment was both striking and conclusive, in every way favourable to the vaunted efficacy of the coca wine in physical fatigue."

* * *

Preservation of Eggs.—A correspondent of the *Grocer* says that at the London Dairy and at the Birmingham Fat Stock Show during the last two years prizes have been offered for the best-preserved eggs. These, as well as many private tests, have shown that the lime-water system is, all things considered, the best. A pound of lime should be stirred with a gallon of water, and the eggs, perfectly fresh, immersed therein in barrels or jars. This excludes air and any germs that might cause mildew or mould, and prevents evaporation, so that the contents of the eggs are not reduced in bulk. It is important to have a considerable excess of lime to replace any that may become carbonated. The vessels containing the eggs should be kept in a cool, well-ventilated place. A very successful variation in the process consists in embedding new-laid eggs, warm from the nest, in a thick paste of lime and water. Eggs thus preserved for six months could hardly be distinguished from those newly laid. The contents of eggs evaporate rather rapidly through the shell, and the object of the preserver must be to prevent this evaporation, and at the same time to allow for the expansion and contraction of the natural air-space in the egg due to changes of temperature. The plan of coating the shells with wax or melted paraffin fails in the latter particular. Strong brine fails because the contents of eggs preserved in it become much reduced in bulk.

A CORK of good quality should be white, tawny, or pink, with a close, fine grain, and free from cracks. Wet plantations give a soft, flabby description of product.

Our Bookshelf

"Reading maketh a full man."—*Bacon.*

A BOOK ON SUICIDE.

Suicide: its History, Literature, Jurisprudence, Causation, and Prevention. By W. WYNN WESTCOTT, M.B. (London: H. K. Lewis, Gower-street, W.C. 1885.)

THIS is an interesting book, and one which will certainly possess an interest for the social scientist, the medical man, and the general reader alike. It deals with a phase of human life which is, to say the least of it, a curious and mysterious feature, if it is also a highly saddening phase of existence. The existence of the tendency to self-destruction is not unknown among the lower animals. There are on record cases in which dogs have apparently destroyed themselves acting under the pressure of various motives, such as the feeling of shame or of grief. It is a well-ascertained fact that scorpions—to descend to a lower order of animal life—have been seen to commit suicide by stinging themselves to death, and by turning against themselves the defensive apparatus with which they have been provided by nature.

The subject of suicide, viewed from a point of view which has only man for its central figure, naturally takes into account the motives which are believed to animate the being who ends his life in a wilful and summary fashion. But the study of this condition is a more intricate matter than the mere investigation of the motives which impel the man to self-destruction. We require to take into account the conditions which operate through large bodies of men, to analyse the occurrence of suicide as a social event, to determine its frequency in various nations and at various periods of the year, and to note the circumstances of sex, age, and other particulars which may be regarded as tending to throw light on the nature of the act. It is this huge task which the author of the book before us has set himself to perform, and it is only due to Dr. Westcott to say that he has performed his laborious work in a highly satisfactory manner. He has given us a volume teeming with interest, and one which cannot fail to prove of great interest to all students of medicine and of social science in the widest acceptation of the latter term.

The idea of suicide has by no means always been viewed with the horror which the act of self-destruction raises in the minds of the public at large. Voltaire, Rousseau, and even David Hume, have been cited in support of the contention that there are circumstances of human life under which the idea of suicide is not only permissible, but, in certain phases, one actually to be approved. The occasion of a patient who is suffering from a horrible, painful, and hopeless disease has always been cited by the advocates of the permissibility of suicide as one which is practically a test instance of the morality of the proceeding. There is pain which is too great to be borne; there is the utter hopelessness of cure; there is the prospect of only weariness and desolation as the days pass; and so it is urged the person thus afflicted may legitimately destroy life and escape by his own will from the unbearable evils to which he has fallen heir.

It is needless to remark, however, that such a line of argument opens the door to a host of considerations opposed to the best interests of society at large; and it is not surprising to find that the arguments thus advanced have never found favour in the eyes of the mass of mankind. The morality, religion, education, and science of our age declare themselves against any fast and loose playing with

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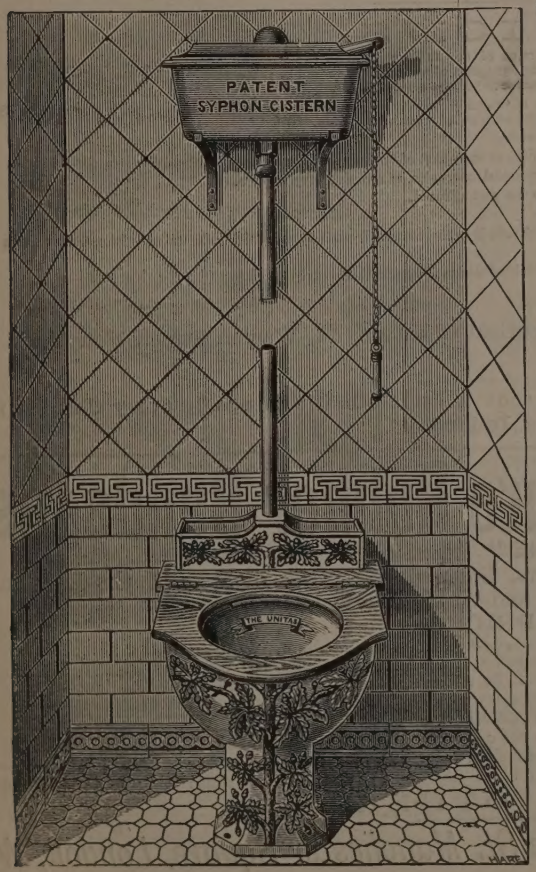

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For Catarrh, or Cold in the Head, &c.—Use a douche of one tablespoonful to one quart of warm water; use also with Nasal Syringe.

For Diarrhœa and Dysentery.—Use dose from half a teaspoonful to a teaspoonful internally, as occasion may require.

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For Cuts and Wounds.—Apply the Extract clear.

Use with care, so as not to allow the Extract to come in contact with linen, and should it become stained, wash at once with cold water, without soap, so as to avoid a stain.

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LOCKYER'S SULPHUR HAIR RESTORER is the safest and best. In a few days it gradually deepens grey hair to a perfectly natural shade. Lockyer's surpasses the effect of costly washes. Never disappointing. Guaranteed harmless. Large bottles, 1s. 6d. Sold everywhere.

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Anti-Dyspeptic Cocoa, or Chocolate Powder.

GUARANTEED PURE SOLUBLE COCOA OF THE FINEST QUALITY.

The FACULTY pronounce it "the most nutritious, perfectly digestible Beverage for BREAKFAST, LUNCHEON, or SUPPER, and invaluable for Invalids and Young Children. *Being without sugar, spice, or other admixture, it suits all palates, keeps for years in all climates, and is four times the strength of Cocoas thickened yet weakened with arrowroot, starch, &c., and in reality cheaper than such mixtures.*

Made instantaneously with boiling water, a Teaspoonful to a Breakfast Cup, costing less than one halfpenny.

COCOATINA possesses remarkable sustaining properties, and is specially adapted for early Breakfasts.

In Air-tight Tins, at 1s. 6d., 3s., 5s. 6d., 4c., by Chemists and Grocers.

PULVERMACHER'S

ELECTRICITY IS LIFE.
TRADE MARK.

WORLD-FAMED

GALVANIC BELTS

ELECTRICITY IS LIFE.
TRADE MARK.

ARE THE ONLY APPLIANCES RECOGNISED BY THE PROFESSION.

BEWARE OF SHAMS!

TESTIMONIAL FROM HER MAJESTY'S PHYSICIANS.

We, the undersigned, have much pleasure in testifying that Mr. J. L. PULVERMACHER'S recent improvements in his Voltaic Batteries and Galvanic Appliances for Medical purposes are of great importance to Scientific Medicine, and that he is entitled to the consideration and support of every one disposed to further the advancement of real and useful progress.
Dated this 9th day of March, 1866.

CHARLES LOCOCK, Phys. to H.M. the Queen.
WM. FERGUSSON, Phys. to H.M. the Queen.
HENRY HOLLAND, Phys. to H.M. the Queen.
J. R. MARTIN, C.B., F.R.C.S., F.R.S.

TESTIMONIALS FOR JULY, 1885.

GALVANISM v. CRAMP and RHEUMATISM.
Holly Brook, Hennar, Leominster, 18th July, 1885.

Dear Sir,—I beg to say that the Galvanic Combined Band I had from you some time since has quite cured me of Rheumatism and Cramp. I have recommended your treatment to several friends, and I think you will have an order from a gentleman in Leominster.—I am, yours respectfully,
(Mrs.) M. A. PHILLIPS.
Mr. Pulvermacher, 194, Regent-street, W.

GALVANISM v. DYSPEPSIA and EXTREME NERVOUS EXHAUSTION.
Cavendish-grove, Southampton, July 16, 1885.

Dear Sir,—I have great pleasure in informing you that your Combined Band has most completely and effectively restored me to perfect health. When I applied to you for advice I was suffering from excessive nervous exhaustion in its worst form, accompanied by pains in the back and head, palpitation of the heart, sleeplessness, and spitting of blood, but these symptoms have entirely disappeard. With regard to the Galvanic Belt you sent me for Dyspepsia, I am happy to say that it has effected a complete cure. Permit me to express the deep gratitude I feel to you for the means of curing what I considered an incurable disease, and without which I might not have been alive to write this.—Thanking you again for your kindness, yours faithfully,
J. W. B.
Mr. J. Pulvermacher, 194, Regent-street, W.
N.B.—Full name and address on application.

GALVANISM v. NERVOUS EXHAUSTION.
53, Park-street, Camden-town, N.W., July 15, 1885.

Sir,—I am happy to inform you that your Galvanic Belt has already done me an immense amount of good, and I have only had it a short time. You are at liberty to use this letter for whatever purpose you may desire.—Yours respectfully,
J. LYONS.
Mr. Pulvermacher, 194, Regent-street, W.

GALVANISM v. PAINS in HEAD and BACK.
2, Albany-villas, Ramsgate, July 14, 1885.

Dear Sir,—I am glad to tell you that I have found great benefit from your Galvanic Belt, and I am happy to say that the pains in the back and head are completely gone.—I am, yours faithfully,
G. MUIRHEAD.
J. L. Pulvermacher, Esq., 194, Regent-street.

GALVANISM v. NERVOUS DEBILITY.
27, Mighell-street, Brighton, July 14, 1885.

Dear Sir,—I am happy to inform you that I have greatly improved in health under your wonderful treatment, and thanking you, dear Sir, for the kindness and attention you have shown me.—I remain, yours gratefully,
C. HART.

GALVANISM v. PAIN and WEAKNESS.
High-street, Wilvescombe, Somerset, July 13, 1885.

Dear Sir,—I am pleased to say that I have found great benefit from your Galvanic Belt. I am thankful to add that I have not lost three days' work since I have had it.—Yours respectfully,
T. ROBBINS.
J. L. Pulvermacher, Esq., 194, Regent-street, London, W.

GALVANISM v. VARICOCELE.
23, Week-street, Maidstone, July 11, 1885.

Dear Sir,—With respect to your appliances in my case, there is no doubt that they are the only remedy to relieve the distressing effects of Varicocele, and I can say at the present time I am in a perfect state of health after three months' use of your Galvanic Belt. Thanking you for your kindness and attention,—I am, yours faithfully,
W. H. REYNOLDS.
J. L. Pulvermacher, Esq., 194, Regent-street, W.

GALVANISM v. NERVOUS DEBILITY.
102, Grand Rue, St. Marie aux Mines, July 3, 1885.

Dear Sir,—A short time ago I bought at your establishment a Combined Band for my wife, who was suffering from Nervous Debility. I am pleased to state that my wife has already derived benefit, the pains in the back and head having almost disappeared. I consulted you in Regent-street about my sister's case, and having seen her physician he entirely approved of your system as being superior to all others he had seen; therefore, I should like you to send me another Combined Band, price £2. 10s., immediately.—I remain, yours faithfully,
J. ZAEPFFEL.
Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM v. GENERAL DEBILITY.
Wingham, East Kent, June 12, 1885.

Gentlemen,—I have certainly derived remarkable benefit from the use of your Galvanic Battery in my complaint, general debility and stomach weakness, which first troubled me in May, 1884.
If you like to make use of this letter you are welcome to do so.—Yours faithfully,
E. W.
Messrs. J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM v. NERVOUS DEBILITY.
Wesley Manse, Clevedon, Somerset, June 1, 1885.

Gentlemen,—I have derived great benefit from the use of your Galvanic Appliances, and there is nothing I can so well rely on to restore the nervous energy as your Galvanic Belt.—Yours truly,
REV. A. D. COFE.
Messrs. J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM v. NERVOUS EXHAUSTION.
Battersea, London, S.W., June 1, 1885.

Dear Sir,—I am pleased to say that I feel quite a new person since wearing your Belt. Your appliances have worked wonders with me, considering I have only had them five weeks.—I remain, yours faithfully,
C. H. COOK.
Mr. J. L. Pulvermacher, 194, Regent-street, W.

MESSRS. J. L. PULVERMACHER & CO., the eminent Medical Galvanists, who have had upwards of 36 years' experience in the treatment of nervous diseases, give advice daily at their Galvanic Establishment, 194, Regent-street, W., free of charge, and patients who are unable to call should write, describing their symptoms, when medical pamphlet and advice will be sent post free.

FOR FURTHER TESTIMONIALS, both Medical and Private, see new Pamphlet, "GALVANISM: NATURE'S CHIEF RESTORER OF IMPAIRED VITAL ENERGY," post free on application to

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194, REGENT STREET, LONDON, W. (Nearly Opposite Conduit Street).

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